

MIZORAM PUBLIC SERVICE COMMISSION

GENERAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF JUNIOR GRADE OF MAH & VS (VETERINARY OFFICER) (CONTRACT) UNDER ANIMAL HUSBANDRY AND VETERINARY SCIENCE DEPARTMENT NOVEMBER, 2021

AH & VETY PAPER - I

Time Allowed : 2 hours

Full Marks : 200

*All questions carry equal marks of 2 each.
Attempt all questions.*

1. Zebu Breed of Cattle involved in the development of Karan fries is –
(a) Sahiwal (b) Red Sindhi
(c) Ongole (d) Tharparkar
2. Merino is a –
(a) Fur type (b) Indian breed
(c) Fine wool type (d) Cross breed
3. Needle teeth –
(a) Incisor teeth (b) Premolar teeth
(c) Canine teeth (d) Molar teeth
4. Milk fat % of yak –
(a) 6 - 10 (b) 1 - 2
(c) 3 - 5 (d) 11 - 14
5. Haugh unit measures –
(a) Quality of albumen (b) Shape index of the eggs
(c) Quality of yolk (d) Strength of egg
6. Maximum tolerable level of ammonia in poultry shed –
(a) 50 ppm (b) 120 ppm
(c) 180 ppm (d) 20 ppm
7. A breed of chicken with black meat –
(a) Kadaknah (b) Cornish
(c) Australorp (d) Aseel
8. A breed of chicken with Pea comb –
(a) White Leghorn (b) Australorp
(c) Brahma (d) Rhode Island Red
9. Number of air sacs present in chicken –
(a) 6 (b) 9
(c) 7 (d) 8
10. The toxic amino acid present in Subabul leaves –
(a) Acetic acids (b) Mimosin
(c) Picric acid (d) Hydrocyanic acid

11. The toxic factor present in Hybrid Napier is –
(a) Mimosine (b) Oxalates
(c) Saponin (d) Nitrate
12. A fly in which the males have half the chromosome number as that of the females –
(a) Butterfly (b) Honey bee
(c) Drosophila (d) None
13. DNA proof reading enzyme is –
(a) Helicase (b) DNA ligase
(c) DNA Gyrase (d) Polymerase III
14. Heterosis in F_1 generation is equal to –
(a) Sdy^2 (b) Sd^2y^2
(c) Sdy^3 (d) Sd^3y^3
15. The father of Modern Animal Breeding –
(a) J.L. Lush (b) R.X.Fisher
(c) Meischer (d) Robert Bakewell
16. The cDNA library is –
(a) the entire collection of CDNA from a particular population of mRNA
(b) the collection of mRNA from DNA
(c) clones carrying genomic DNA
(d) a partial genomic DNA library
17. Mating of animals with similar phenotype is called –
(a) Incrossing (b) Assortative mating
(c) Random mating (d) Inter-se-mating
18. The most frequently occurring observation in a set of data is –
(a) Median (b) Mean
(c) Mode (d) Variance
19. In poultry heterogametic sex is –
(a) Male (b) Female
(c) Both (d) Cock
20. Second quartile is –
(a) Mean (b) Median
(c) Mode (d) Geometric mean
21. Heterosis is due to –
(a) Dominance (b) Additive gene action
(c) Non additive gene action (d) Epistasis
22. Inbreeding increases the number of _____ in a population.
(a) Homozygous alleles (b) Heterozygous alleles
(c) Hemizygous alleles (d) Lethal alleles
23. Inbreeding coefficient of an offspring of half-sib mating is –
(a) $2/1$ (b) $1/4$
(c) $1/2$ (d) $1/8$

24. Hissardale is evolved from –
- (a) Bikaneri X Merino (b) Gaddi X Merino
(c) Nilgiri X Merino (d) Nili-Ravi X Merino
25. The statistical design which allows unequal number of replications of treatment is –
- (a) CRD (b) RBD
(c) LSD (d) Switch over design
26. The test of choice for comparing two variances is –
- (a) T test (b) Chi-square test
(c) F test (d) Z test
27. Which memory of the computer stores program to be currently executed?
- (a) ROM (b) PROM
(c) RAM (d) All of these
28. The dose of the drug which can kill 50% of the population is –
- (a) ED50 (b) LC50
(c) EC50 (d) LD50
29. Excess intake of unsaturated fatty acids may cause a deficiency of –
- (a) Vitamin E (b) Vitamin A
(c) Thiamin (d) Vitamin K
30. Minimum ME requirement for broiler starter feed (keal/kg) as per BIS –
- (a) 2700 (b) 2600
(c) 2800 (d) 2900
31. Which of the following vitamin is destroyed by oxidation?
- (a) Vitamin D (b) Vitamin A
(c) Biotin (d) Thiamin
32. In Van Soest method of analysis, we can determine the hemicelluloses as –
- (a) NDF – ADF (b) ADF – Lignin
(c) ADF – Cellulose (d) None of these
33. A sugar containing β D-galactosidic linkage –
- (a) Sucrose (b) Cellobiose
(c) Lactose (d) Maltose
34. Mineral which activates enzyme transferring phosphate from ATP –
- (a) Magnesium (b) Calcium
(c) Phosphorus (d) Manganese
35. The minimum crude protein content in compounded cattle feed (grade I) as per BIS –
- (a) 20% (b) 18%
(c) 22% (d) 24%
36. Best method among the following for removing aflatoxin in feed –
- (a) Heating (b) Washing
(c) Drying in hot air oven (d) Drying in sunlight

37. Curled toe paralysis in chicks is caused by the deficiency of the Vitamin –
(a) B₁ (b) B₂
(c) B₆ (d) B₁₂
38. White muscle disease in calves is caused by deficiency of –
(a) Vitamin A & Manganese (b) Vitamin E & Selenium
(c) Essential fatty acids (d) Copper
39. Avidin is antivitamin for –
(a) Thiamine (b) Biotin
(c) Menadione (d) Folic acid
40. The greenish yellow colour of whey is due to –
(a) Carotene (b) Thiamine
(c) Riboflavin (d) Xanthophyll
41. Steely or Stringy wool in sheep results from deficiency of –
(a) Cobalt (b) Copper
(c) Manganese (d) Iron
42. Anti infective vitamin –
(a) Vitamin C (b) Vitamin D
(c) Vitamin A (d) Vitamin E
43. Pectin present in cell wall is a –
(a) Hetero polysaccharide (b) Trisaccharide
(c) Pentasaccharide (d) Mucopolysaccharide
44. Gossypol is found in –
(a) Cotton seed (b) Mustard seed
(c) Linseed (d) Sesame seed
45. In the process of hay making much of carotene is lost due to –
(a) Leaching (b) Bleaching
(c) Storage in shade (d) Lactic acid production
46. Good quality silage can be made from green fodder containing a dry matter percent of –
(a) 30-35 (b) 40-45
(c) 15-20 (d) 80-85
47. Antimetabolite of vitamin K is –
(a) Tannic acid (b) Avidin
(c) Menaquinone (d) Warfarin
48. Flushing is practiced –
(a) During pregnancy (b) After parturition
(c) Before breeding (d) During growth
49. Brownish discolouration of fresh meat is due to –
(a) Metmyoglobin (b) Oxymyoglobin
(c) Myoglobin (d) Haemoglobin

50. White spot in chilled carcasses are produced by the growth of –
(a) *Sporotrichum* sp. (b) *Pseuhomonas* sp.
(c) *Aspergillus* sp. (d) *Penicillium* sp.
51. The permissible level of Nitrite in cured meat is –
(a) 200 ppm (b) 40 ppm
(c) 156 ppm (d) 500 ppm
52. Pink rot in egg is caused –
(a) *Alkaligenes* Sp. (b) *Staphylococcus* Sp.
(c) *Mucor* Sp. (d) *Pseudomonas* Sp.
53. Q-fever is caused by organism –
(a) *Coxeilla burnellii* (b) *Streptococcus ubereis*
(c) *Brucella abortus* (d) *Microbacterium buberculosis*
54. CAMP test is –
(a) To detect mastitis (b) To find *S. Agalactiae* in milk
(c) To confirm the *Staphylococcus aureus* in milk (d) None of these
55. AGMARK means –
(a) Agricultural Marketing (b) Agricultural Marking
(c) Agricultural Mark (d) Agriculture Market
56. Casings prepared from large intestines of cattle and pigs is –
(a) Weasand (b) Runners
(c) Middles (d) Rounds
57. Example of fermented sausage –
(a) Frankfurter (b) Mortadella
(c) Breakfast sausage (d) Kielbas
58. Black rots is a bacterial spoilage condition of egg caused by –
(a) *Proteus* spp (b) *Pseudomonas* spp
(c) *Aeromonas* spp (d) All of these
59. Airborne organisms in a meat plant/abattoir are disinfected by the method of –
(a) Foaming (b) Soaking
(c) Surfing (d) Fogging
60. Test for finding the mixing of the cow and buffalo milk is –
(a) COB test (b) Baudauin test
(c) Hansa test (d) Alizarin test
61. Micro organism causing ropiness in milk is –
(a) *Alcaligenes viscolactis* (b) *Bacillus subtilis*
(c) *Streptococcus thermophilus* (d) *Lactobacillus acidophilus*
62. A good lard has an iodine value of –
(a) 36 (b) 46
(c) 56 (d) 66

63. True sweetbread is actually –
- (a) Pancreas (b) Thymus
(c) Thyroid (d) Pituitary
64. Halothane test is widely used to identify –
- (a) Incomplete bleeding (b) Meat spoilage
(c) Stress susceptibility of pigs (d) Bruises
65. Quantity demanded (Q) is expressed as a mathematical function of price (P). The demand function may thus be written as –
- (a) $Q_d = a + bP$ (b) $Q_d = a - bP$
(c) $Q_d = bp - a(2)$ (d) $Q_d = bP + a(2)$
66. When change in price of X causes a direct change in quantity Y –
- (a) $E_c = 0$ (b) $E_c = \text{Positive}$
(c) $E_c = \text{Negative}$ (d) None
67. A business that is chartered or registered by the state and that operates separately from the owner or owners.
- (a) Public Limited Company (b) Private Company
(c) Corporation (d) Cooperatives
68. The change in total product resulting from the use of one additional unit of the variable factor.
- (a) Total Physical Product (TPP) (b) Average Physical Product (APP)
(c) Marginal Physical Product (MPP) (d) Equilibrium price
69. Costs paid in cash is –
- (a) Explicit cost (b) Implicit cost
(c) Sunk cost (d) Opportunity cost
70. Demand is *inelastic* if the percentage change in quantity is less than the percentage change in price –
- (a) $E > 1$ (b) $E \neq 1$
(c) $E = 1$ (d) $E < 1$
71. Mr. F. L. Brayne is associated with –
- (a) Marthardam Project (b) Gurgaon Project
(c) Sevagram attempt (d) Etawah pilot project
72. Panchayat Raj started on –
- (a) 2nd October 1959 (b) 2nd October, 1956
(c) 2nd October, 1949 (d) 2nd October, 1953
73. Biological requirements for human survival come under –
- (a) safety need (b) Physiological needs
(c) Esteem needs (d) Self-actualization needs
74. PRI was constitutionalized through the –
- (a) 73rd Constitutional Amendment Act, 1992 (b) Article 21 G of the Indian Constitution
(c) 75th Constitutional Amendment Act, 1992 (d) Article 25 G of the Indian Constitution
75. The number of elements in a learning situation are –
- (a) 3 (b) 4
(c) 5 (d) 6

76. Who is considered as father of statistics?
(a) RA Fisher (b) Pearson
(c) AL Bowley (d) Boddington
77. Shorting of unlike lots of the produce into different lots according to the quality specification laid down.
(a) Standardization (b) Grading
(c) Both (a) & (b) (d) None of these
78. The region most conducive to effective interpersonal relationships and communications is termed as—
(a) Facade (b) Arena
(c) Blind spot (d) All of these
79. Degree to which an innovation is perceived as being consistent with the existing values is —
(a) Relative advantage (b) Complexity
(c) Compatibility (d) All of these
80. “If I have to get that gold medal, I should work hard at studies”. reflects —
(a) Determination (b) Intrinsic motivation
(c) Industriousness (d) Extrinsic motivation
81. The cone of experience was developed by —
(a) Egder Dale (b) Berlo C K
(c) Kuldeep Nair (d) S C Parmer
82. Seaman A Knapp conducted result demonstration in —
(a) Cotton (b) Maize
(c) Barley (d) Wheat
83. Reading newspaper is —
(a) Intra personal communication (b) Interpersonal communication
(c) Mass communication (d) Dyadic communication
84. Agriculture was made a state subject through —
(a) Government of India Act (1919) (b) Royal Commission Report (1928)
(c) Ford Foundation Report (1959) (d) GMF (enquiry report (1955)
85. Intensive Cattle Development Project was launched in —
(a) 1969 - 70 (b) 1975 - 76
(c) 1964 - 65 (d) 1980 - 81
86. The constitutional amendment made to ensure free and compulsory education to all children —
(a) 86th Amendment (b) 74th Amendment
(c) 73rd Amendment (d) 92nd Amendment
87. On ICAR 93rd foundation day-2021 the Government of India launched KisanSarathi which is associated with —
(a) Digital platform (b) Right information right time
(c) Regional language (d) All of these
88. In all animals, which of the following teeth are used for age determination —
(a) Incisor of lower jaw (b) Incisor of upper jaw
(c) Canine of lower jaw (d) Canine of upper jaw

89. If, 4 rings are present in horn of cattle, find out the age of same cattle –
(a) 6 years (b) 4 years
(c) 5 years (d) 8 years
90. Wallowing is necessary for –
(a) Buffalo & Pig (b) Buffalo & Goat
(c) Cattle & Buffalo (d) Buffalo & Sheep
91. Disinfectant of choice at the time of FMD outbreak –
(a) 4% NaOH (b) 5% NaCl
(c) KOH (d) HCOH
92. Calf starter should be introduced from –
(a) 1st week (b) 2nd week
(c) 3rd week (d) 4th week
93. Calcium requirement (BIS 1992) in adult layer ration is –
(a) 1% (b) 2%
(c) 3% (d) 4%
94. Light requirement for layer bird is –
(a) 16 hrs (b) 23 hrs
(c) 10 hrs (d) 18 hrs
95. Which of the following statement is not correct with respect to loose housing?
(a) Loose housing is cheaper in construction (b) Loose housing is labour saving
(c) Cow tends to remain cleaner in loose housing (d) Heat detection is easier in loose housing
96. Advantages of face out housing are all except –
(a) Less danger of spread of disease (b) Clearing and milking takes less time
(c) Feeding of cows takes more time (d) Total time spent on animal comparatively more
97. _____ breeds are migratory in nature and are maintained on low input cost.
(a) Kankrej (b) Gangotri
(c) Lakhimi (d) Belahi
98. Long and pendulous ears folded like a leaf. Ears hang all the time and their inside face forward.
(a) Red sindhi (b) Kankrej
(c) Gir (d) Bachur
99. High producing dairy cows need to rest daily for a period of –
(a) 12-14 hours (b) 10-12 hours
(c) 8-10 hours (d) 6-8 hours
100. Muscle contraction is due to formation of –
(a) Myosin (b) Actin
(c) Actomyosin (d) Myofilament